A NEW MOTH ON COCONUT FROM CUBA, WITH DESCRIPTIONS OF NEW GENERA FOR RELATED SPECIES

(LEPIDOPTERA, PHALAENIDAE)

By JOHN G. FRANCLEMONT, *Bureau of Entomology and Plant Quarantine, United States Department of Agriculture*

Over a year ago Dr. S. C. Bruner of Cuba submitted for identification a moth reared from a larva found feeding on the rachis of the leaves of the coconut palm. Larvae, pupae and a cocoon were included in the sending. Later he was able to send three more moths, all reared. The moth, a new species, is a striking form representating a new genus related to *Scolecocampa*, which is the *Herminodes*[1] of authors writing on the Neotropical fauna. The venation of the hind wing is its most diagnostic character, vein 5 being weak and arising from slightly below the middle of the discocellulars.

Two other generic names are proposed at this time for described species which show closer relationship to the new species than to the species of *Scolecocampa*.

Echinocampa, new genus

Type: Echinocampa cocophaga, new species.

Head prominent; antennae pectinate in the male, subserrate in the female; eyes large, globular, naked, unlashed; palpi oblique and ascending, reaching to slightly above bases of antennae, first segment short, second segment long, third segment very short, approximately one-fifth the length of the second, clothed with appressed scales; proboscis reduced, short; front with an overhanging tuft of scales. Thorax clothed with flat scales and hairlike scales intermixed; legs closely scaled, the tibiae unarmed and unspined, fringed with short hair, longest on the posterior tibiae. Fore wings elongate, narrow and linear, outer margin almost straight, apex and inner angle rounded, without an accessory cell, with 7-10 from upper angle of discal cell, veins 8-9 stalked. Hind wing normal in shape, with vein 5 weak and arising from slightly below the middle of the discocellulars, with veins 3 and 4 short stalked. Abdomen long and exceeding the hind wings, clothed with scales.

Male genitalia with the arms of tegumen and vinculum moderately broad; vinculum with a broad flattened saccus; uncus moderately long; valves symmetrical, apex cupped, costa with a slight hump near base; clasper (?) broad, articulate; juxta with two large apical spurs; aedoeagus with three short spines on apical margin.

---

[1]The genotypes of *Scolecocampa* Guenée, species Général des Lépidoptères, vol. 5, p. 131, 1852, and *Herminodes* Guenée, Species Général des Lépidotères, vol. 6, p. 431, 1852, respectively, *ligni* Guenée 1852 = *liburna* Geyer 1837 and *nigripalpis* Guenée 1852, are congeneric. It is thus necessary to employ the name *Scolecocampa* for all the Neotropical species now referred to *Herminodes*.

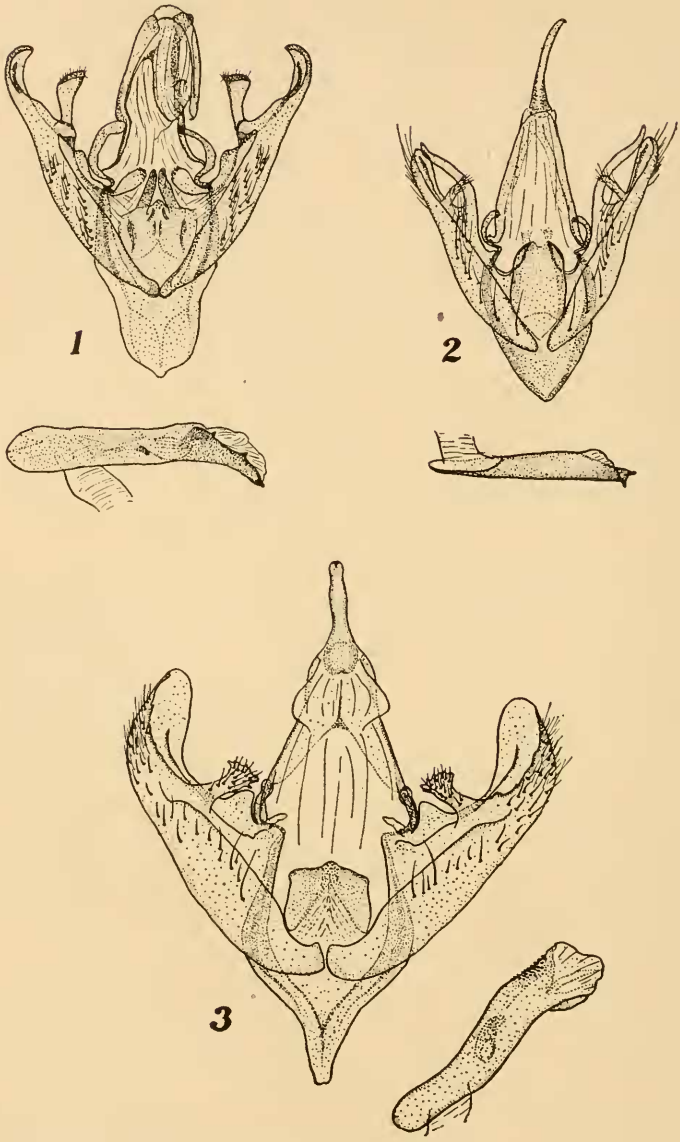

PLATE 26. MALE GENITALIA

Fig. 1. *Echinocampa cocophaga;* fig. 2, *Rhamnocampa albistriga;* fig. 3, *Elegocampa catharina.* (All figures drawn to the same scale.)

Female genitalia with the lower (anterior) vaginal plate with a narrow, deep sinus; ductus bursae heavily sclerotized; bursa with a circle of small, internal spines at about the middle.

The genus may be distinguished immediately from all others in the complex of genera centering around *Scolecocampa* by the position of vein 5 of the hind wings.

Echinocampa cocophaga, new species

Head clothed with gray white scales and hair; scape of antennae clothed with white scales; fore wings gray with a slight rusty tint, costal margin white, two small dark dots in the cell, an indication of dark grayish streaking on the veins, fringe concolorous; disc of thorax concolorous with fore wings, collar and tegulae more grayish; hind wings white; abdomen white. Underside white. Expanse 31-34 mm.

Male genitalia: Plate 26, figure 1.

Female genitalia: Plate 27, figure 4.

Venation: Plate 28, figure 7.

Larva: Flattened dorso-ventrally; head partially withdrawn into the first thoracic segment, flattened and extended forward with the mouthparts in a horizontal plane; first thoracic segment very conspicuously wider than the second, covering the basal one-third of head, cervical shield highly sclerotized; thoracic and abdominal segments heavily spiculate laterally and lightly dorsally, except the last three abdominal segments which have the spiculation as heavy on the dorsum as on the sides; spiracular openings elevated; setigerous tubercles raised and surrounded by sclerotized plates; setae 2, 3, 5 and 6 stout and extremely long, those on the three abdominal segments before the last the longest and stoutest; thoracic legs and abdominal prolegs extended laterally, the crochets of the latter large. The larvae were found feeding upon the rachis of the leaves of the coconut palm (*Cocos nucifera*).

Pupa: Normal for the group, somewhat flattened dorso-ventrally, with two raised prominences on the head above the bases of the antennae. The cocoon fusiform, of silk and shreds from the rachis of the leaf of the foodplant.

TYPE: ♂, Marianao, Havana, Cuba, May 16, 1948, Cesar Abrev Coll. (E. E. A. de Cuba No. 11337). Larva on Coconut Palm. USNM TYPE No. 59220.

PARATYPE: 1 ♂, Havana, Cuba, Emerged Dec. 1, 1947, E. Padilla Coll. Breeding on Coconut Palm; 1 ♂, Marianao, Havana, Cuba, Emerged Feb. 25, 1948, Cesar Abrev Coll., on Coconut Palm; 1 ♀, Jaguey Grande, Cuba, July 1947, Cesar Abrev Coll., from pupa on Coconut Palm.

The venational character emphasized in the generic description will separate this species easily from all related species.

Elegocampa, new genus

TYPE: *Herminodes catharina* Schaus = *Elegocampa catharina* (Schaus).

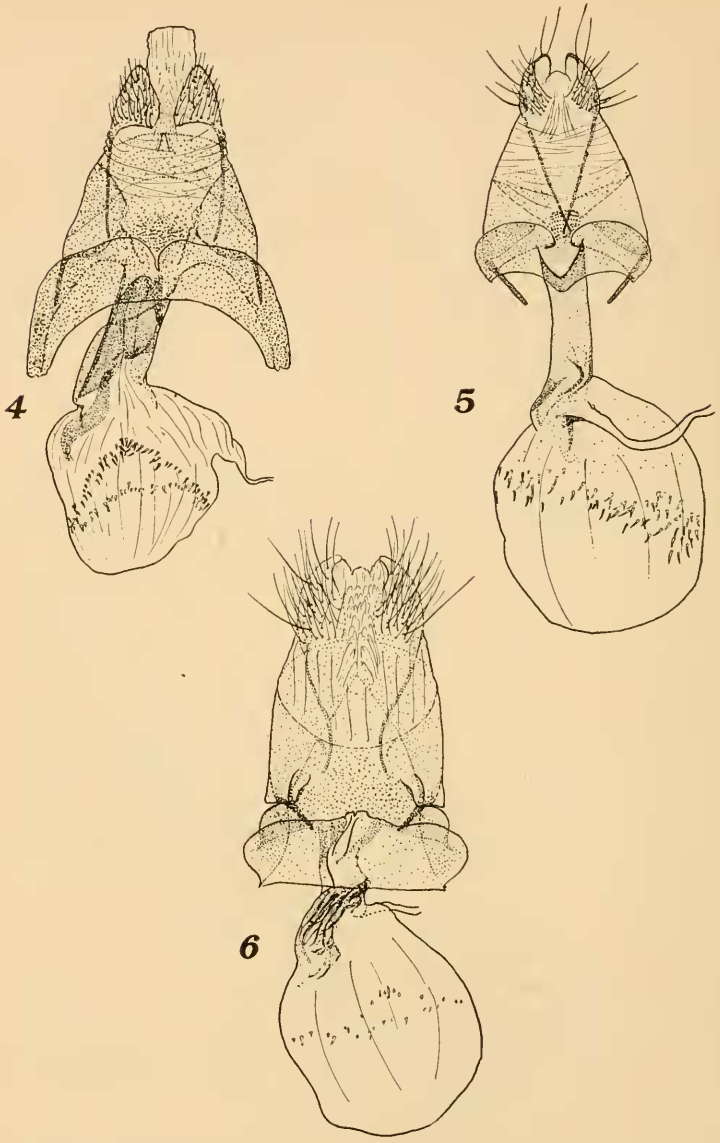

PLATE 27. FEMALE GENITALIA

Fig. 4, *Echinocampa cocophaga;* fig. 5, *Rhamnocampa albistriga;* fig. 6, *Elegocampa catharina.* (All figures drawn to the same scale as Plate 26.)

Head prominent; antennae subpectinate in the male, fasciculate in the female; eyes large and spherical, naked and unlashed; palpi oblique and ascending, reaching to bases of antennae, first segment short, second segment long, third segment about one-fifth the length of second, clothed with appressed scales and hair; proboscis weak, moderately long; front with a triangular crest of hair and hairlike scales. Thorax clothed with narrow scales and hair; legs clothed with scales, tibia unarmed and unspined, fringed with hair. Fore wings moderately long and narrow, the apex evident, outer margin oblique, with the venation as in *Echinocampa*. Hind wings with vein 5 strong and well below the middle of the discocellulars. Abdomen exceeding the hind wings, clothed with narrow appressed scales.

Male genitalia with the arms of tegumen and vinculum moderately broad, viniculum with saccus prolonged and narrowed; uncus short, broadest in the middle, constricted before apex and before base; valves symmetrical, apex cupped, costa with a marked hump near base; clasper (?) broad, spinose and ankylose; juxta quadrate; aedoeagus with an exterior scobinate patch near apex.

Female genitalia with the lower (anterior) vaginal plate heavily sclerotized, invaginated on the posterior and lateral margins; ductus bursae short, sclerotized at its entrance into the bursa; bursa with a ring of irregularly placed, weak, internal spines around the middle.

This genus may be readily distinguished from *Echinocampa* by the position of vein 5 of the hind wing and by the less widely pectinate antennae of the male as well as by the ankylose clasper (?) of the male genitalia.

Included species:

Elegocampa catharina (Schaus)

Herminodes catharina Schaus, Ann. Mag. Nat. Hist. (10) 12: 382, 1933.

Male genitalia: Plate 26, figure 3.

Female genitalia: Plate 27, figure 6.

Venation: Plate 28, figure 9.

The immature stages and foodplant of this species are unknown.

Rhamnocampa, new genus

TYPE: *Herminodes albistriga* Schaus = *Rhamnocampa albistriga* (Schaus).

Head prominent; antennae fasciculate in the male and ciliate in the female; eyes large and spherical, naked and unlashed; palpi oblique and ascending, reaching to well above bases of antennae, first segment short, second segment long, third segment about one-third the length of second, clothed with narrow, appressed scales; front with an overhanging tuft of hairlike scales. Thorax clothed with scales and some hairlike scales; tibiae unarmed and unspined, fringed with short hair. Fore

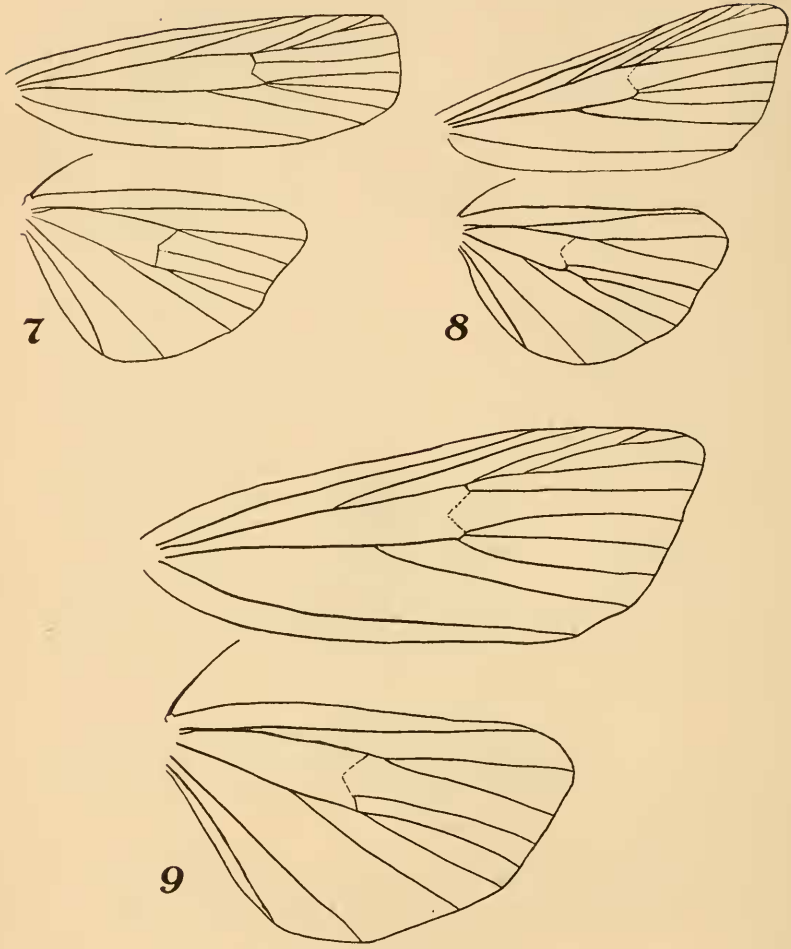

PLATE 28. WING VENATION

Fig. 7, *Echinocampa cocophaga;* fig. 8, *Rhamnocampa albistriga;* fig. 9, *Elegocampa catharina.* (All figures drawn to the same scale.)

wings long, trigonate, apex evident, with an accessory cell, veins 7-9 from apex of accessory cell, veins 8 and 9 stalked, vein 10 from upper side of accessory cell. Hind wings with vein 5 strong and from lower angle of discal cell, veins 3 and 4 short stalked. Abdomen exceeding the hind wings, clothed with scales.

Male genitalia with the arms of the tegumen moderately broad; vinculum short, with a broad flattened saccus; uncus moderately long and narrow; valves symmetrical, apex cupped, costa with a long spurlike prolongation from near the base; clasper (?) narrow, slight, ankylose; juxta rectangular, emarginate at apex and produced at base; aedœagus with the apex more heavily sclerotized and with two small apical spinelike projections.

Female genitalia with the opening of the ductus bursae near the middle of the lower third of the lower (anterior) vaginal plate; ductus bursae moderately long, lightly sclerotized except at entrance into bursa, there more heavily sclerotized; upper third of bursa slightly thickened, with a ring of small, internal spines around the middle.

The genus can be easily distinguished from both *Echinocampa* and *Elegocampa* by the venation of the fore wing, which has an accessory cell.

Included species:

Rhamnocampa albistriga (Schaus)

Herminodes albistriga Schaus, Proc. U. S. Natl. Mus. 46:507, 1914.

Male genitalia: Plate 26, figure 2.

Female genitalia: Plate 27, figure 5 (Type).

Venation: Plate 28, figure 8.

Superficially the larva and cocoon of this species are rather similar to those of *E. cocophaga*. The larva also feeds upon the coconut palm.

From *Scoleocampa* the three new genera may be differentiated by the shape assumed by the vestiture of the second palpal segment; in *Scolecocampa* the second segment bears long hairs shortest at the base and longest at the apex, giving the segment a triangular appearance and the entire palpus a beaklike appearance; in the three genera described here the second palpal segment appears cylindrical, being clothed with appressed scales. The aedoeagi of these genera lack the cornuti on the vesica, so characteristic of the species of *Scolecocampa*.

NINTH INTERNATIONAL CONGRESS OF ENTOMOLOGY

The Ninth International Congress of Entomology will be held August 17-24, 1951, in Amsterdam, Netherlands. Entomologists wishing to receive programs and application forms are requested to communicate now with the Secretariat, c/o Physiologisch Laboratorium, 136 Rapenburgerstraat, Amsterdam.